

## General

### Title

Chronic graft versus host disease (cGVHD): percentage of patients with moderate or severe cGVHD with systemic immunosuppressive therapy prescribed.

### Source(s)

Proposed chronic graft versus host disease measure set: questionnaire, measures with specifications, glossary. Arlington Heights (IL): American Society for Blood and Marrow Transplantation; 26 p.

## Measure Domain

### Primary Measure Domain

Clinical Quality Measures: Process

### Secondary Measure Domain

Does not apply to this measure

## Brief Abstract

### Description

This measure is used to assess the percentage of patients with moderate or severe chronic graft versus host disease (cGVHD) with systemic immunosuppressive therapy prescribed.

### Rationale

The pathogenesis of chronic graft versus host disease (cGVHD) is poorly understood. Symptoms usually present within 3 years after allogeneic hematopoietic cell transplantation (HCT) and are often preceded by a history of acute GVHD. Manifestations of chronic GVHD may be restricted to a single organ or tissue or may be widespread. Chronic GVHD can lead to debilitating consequences, e.g., joint contractures, loss of sight, end-stage lung disease, or mortality resulting from profound chronic immune suppression leading to recurrent or life-threatening infections.

*Support (verbatim) from National Institutes of Health (NIH) Consensus Development Project:* Moderate chronic GVHD involves (1) at least 1 organ or site with clinically significant but no major disability

(maximum score of 2 in any affected organ or site) or (2) 3 or more organs or sites with no clinically significant functional impairment (maximum score of 1 in all affected organs or sites). A lung score of 1 will also be considered moderate chronic GVHD.

Severe chronic GVHD indicates major disability caused by chronic GVHD (score of 3 in any organ or site). A lung score of 2 or greater will also be considered severe chronic GVHD.

[In] patients with chronic graft versus host disease (cGVHD) that involves 3 or more organs or with a score of 2 or greater in any single organ, systemic immunosuppressive therapy may be considered. Good medical practice and judgment dictate flexibility in this recommendation. Some experts incorporate the presence or absence of published high-risk features (e.g., thrombocytopenia) and the underlying reason for transplantation (e.g., malignant versus nonmalignant underlying disease) into the decision of whether or not to treat with systemic immunosuppression. Early intervention with effective systemic therapy may prevent progression to severe chronic GVHD, whereas comorbid infections may also modify decisions regarding the timing and intensity of therapy. Effective immune modulating therapy given to patients with clinically significant chronic GVHD involvement has the potential to ameliorate the clinical manifestations, reduce transplant-related mortality (TRM), or both. In patients who are already receiving immune-suppressive medications, the dosage may be increased, or other agents can be added.

*Statement (verbatim) from NIH Consensus Development Project on gap:* The time-honored description of limited versus extensive chronic GVHD was proposed from only 20 cases published in 1980. The [NIH] Working Group proposes a new global assessment of chronic GVHD severity that is clinically suitable and is appropriate for use as an inclusion criterion in therapeutic clinical trials or as an indication for systemic immunosuppressive treatment.

*Statement from American Society for Blood and Marrow Transplantation (ASBMT) Task Force on gap:* The use of systemic immunosuppressive therapy in cGVHD has guided by a study published in 1980. Due to the release of new guidelines in 2005, we believe there is a gap in the use of systemic therapy in moderate and severe cGVHD. Due to the significant disability and mortality associated with severe cGVHD, we believe closing this gap to be critical to improving transplant patient care.

## Evidence for Rationale

Filipovich AH, Weisdorf D, Pavletic S, Socie G, Wingard JR, Lee SJ, Martin P, Chien J, Przepiorka D, Couriel D, Cowen EW, Dinndorf P, Farrell A, Hartzman R, Henslee-Downey J, Jacobsohn D, McDonald G, Mittleman B, Rizzo JD, Robinson M, Schubert M, Schultz K, Shulman H, Turner M, Vogelsang G, Flowers ME. National Institutes of Health consensus development project on criteria for clinical trials in chronic graft-versus-host disease: I. Diagnosis and staging working group report. *Biol Blood Marrow Transplant*. 2005 Dec;11(12):945-56. [PubMed](#)

Proposed chronic graft versus host disease measure set: questionnaire, measures with specifications, glossary. Arlington Heights (IL): American Society for Blood and Marrow Transplantation; 26 p.

Shulman HM, Sullivan KM, Weiden PL, McDonald GB, Striker GE, Sale GE, Hackman R, Tsoi MS, Storb R, Thomas ED. Chronic graft-versus-host syndrome in man. A long-term clinicopathologic study of 20 Seattle patients. *Am J Med*. 1980 Aug;69(2):204-17. [PubMed](#)

Sullivan KM. Graft vs. host disease. In: Blume KG, Forman SJ, Appelbaum FR, editor(s). *Thomas' Hematopoietic Cell Transplantation*. 3rd ed. Malden (MA): Blackwell Publishing; 2004. p. 635-64.

## Primary Health Components

Chronic graft versus host disease (cGVHD); moderate or severe cGVHD; systemic immunosuppressive therapy

## Denominator Description

The number of patients in your selection diagnosed with chronic graft versus host disease (cGVHD) AND condition is considered moderate or severe (see the related "Denominator Inclusions/Exclusions" field)

## Numerator Description

The number of patients in your selection diagnosed with chronic graft versus host disease (cGVHD) AND condition is considered moderate or severe AND receiving systemic immunosuppression therapy (see the related "Numerator Inclusions/Exclusions" field)

## Evidence Supporting the Measure

### Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

### Additional Information Supporting Need for the Measure

Reported incidence rates of chronic graft versus host disease (cGVHD) after allogeneic transplantation range from 6% to 80% according to recipient age, donor type, hematopoietic cell transplantation (HCT) source (peripheral blood, bone marrow, or umbilical cord blood stem cells), graft manipulation (T-cell depletion), and use of post transplantation donor lymphocyte infusion (DLIs). Reliable incidence estimates in different cohorts of HCT recipients are compromised by (1) lack of standardized, widely used diagnostic guidelines; (2) variability in observer experience; (3) limited expert follow-up at a distance from transplant centers; (4) differences in the statistical methods applied (e.g., use of the Kaplan-Meier versus cumulative incidence estimates and variable requirement for some minimal survival [60-100 days] for patients to be considered at risk of chronic GVHD); and (5) the sometimes protean nature of early chronic GVHD symptoms, which mimic alternative diagnoses.

### Evidence for Additional Information Supporting Need for the Measure

Filipovich AH, Weisdorf D, Pavletic S, Socie G, Wingard JR, Lee SJ, Martin P, Chien J, Przepiorka D, Couriel D, Cowen EW, Dinndorf P, Farrell A, Hartzman R, Henslee-Downey J, Jacobsohn D, McDonald G, Mittleman B, Rizzo JD, Robinson M, Schubert M, Schultz K, Shulman H, Turner M, Vogelsang G, Flowers ME. National Institutes of Health consensus development project on criteria for clinical trials in chronic graft-versus-host disease: I. Diagnosis and staging working group report. *Biol Blood Marrow Transplant*. 2005 Dec;11(12):945-56. [PubMed](#)

Remberger M, Aschan J, Lonnqvist B, Carlens S, Gustafsson B, Hentschke P, Klaesson S, Mattsson J, Ljungman P, Ringden O. An ethnic role for chronic, but not acute, graft-versus-host disease after HLA-identical sibling stem cell transplantation. *Eur J Haematol*. 2001 Jan;66(1):50-6. [PubMed](#)

Rocha V, Wagner JE Jr, Sobocinski KA, Klein JP, Zhang MJ, Horowitz MM, Gluckman E. Graft-versus-host disease in children who have received a cord-blood or bone marrow transplant from an HLA-identical sibling. Eurocord and International Bone Marrow Transplant Registry Working Committee on Alternative Donor and Stem Cell Sources. *N Engl J Med*. 2000 Jun 22;342(25):1846-54. [PubMed](#)

Sullivan KM, Agura E, Anasetti C, Appelbaum F, Badger C, Bearman S, Erickson K, Flowers M, Hansen J, Loughran T, et al. Chronic graft-versus-host disease and other late complications of bone marrow transplantation. *Semin Hematol.* 1991 Jul;28(3):250-9. [75 references] [PubMed](#)

## Extent of Measure Testing

The Chronic Graft Versus Host Disease (cGVHD) measure set was developed by the American Society for Blood and Marrow Transplantation (ASBMT) using a rigorous methodology (adapted from the American Medical Association's Physician Consortium for Performance Improvement [AMA-PCPI] and including field testing) and adapted for use in Practice Improvement Modules (PIMs) by the American Board of Internal Medicine (ABIM).

## Evidence for Extent of Measure Testing

Joseph TL. (Executive Director, American Society for Blood and Marrow Transplantation). Personal communication. 2013 Jan 21. 1 p.

## State of Use of the Measure

### State of Use

Current routine use

### Current Use

not defined yet

## Application of the Measure in its Current Use

### Measurement Setting

Ambulatory/Office-based Care

Hospital Inpatient

Hospital Outpatient

Intensive Care Units

### Professionals Involved in Delivery of Health Services

not defined yet

### Least Aggregated Level of Services Delivery Addressed

Clinical Practice or Public Health Sites

## Statement of Acceptable Minimum Sample Size

Specified

## Target Population Age

All ages

## Target Population Gender

Either male or female

# National Strategy for Quality Improvement in Health Care

## National Quality Strategy Aim

Better Care

## National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

# Institute of Medicine (IOM) National Health Care Quality Report Categories

## IOM Care Need

Living with Illness

## IOM Domain

Effectiveness

# Data Collection for the Measure

## Case Finding Period

12 months

## Denominator Sampling Frame

Patients associated with provider

## Denominator (Index) Event or Characteristic

Clinical Condition

Encounter

Therapeutic Intervention

## Denominator Time Window

not defined yet

## Denominator Inclusions/Exclusions

Inclusions

The number of patients in your selection diagnosed with chronic graft versus host disease (cGVHD) AND condition is considered moderate or severe

Note: Patients can be included in the chart abstraction if:

They have been seen by the practice within the past 12 months; and  
Management decisions regarding care are made primarily by providers in the practice.

Select at least 10 of your patients who have had hematopoietic cell transplant (HCT) and cGVHD. Refer to the original measure documentation for administrative codes.

Exclusions

Patient with co-morbid infections

## Exclusions/Exceptions

not defined yet

## Numerator Inclusions/Exclusions

Inclusions

The number of patients in your selection diagnosed with chronic graft versus host disease (cGVHD) AND condition is considered moderate or severe AND receiving systemic immunosuppression therapy

Note: This requires documentation in the patient's medical record that the user had determined the patient's cGVHD to be moderate or severe and that systemic immunosuppressive therapy was prescribed (see the original measure documentation for details).

Exclusions

None

## Numerator Search Strategy

Fixed time period or point in time

## Data Source

Administrative clinical data

Paper medical record

## Type of Health State

Does not apply to this measure

## Instruments Used and/or Associated with the Measure

Unspecified

## Computation of the Measure

### Measure Specifies Disaggregation

Does not apply to this measure

### Scoring

Rate/Proportion

### Interpretation of Score

Desired value is a higher score

### Allowance for Patient or Population Factors

not defined yet

### Standard of Comparison

not defined yet

## Identifying Information

### Original Title

Patients with moderate or severe chronic GVHD with systemic immunosuppressive therapy prescribed.

### Measure Collection Name

Chronic Graft Versus Host Disease Measure Set

### Submitter

American Society for Blood and Marrow Transplantation - Professional Association

### Developer

American Society for Blood and Marrow Transplantation - Professional Association

## Funding Source(s)

American Society for Blood and Marrow Transplantation

## Composition of the Group that Developed the Measure

The American Society for Blood and Marrow Transplantation (ASBMT) Education Practice Improvement Modules Task Force:

Linda Burns, MD (*chair*)  
Stephan A Grupp, MD, PhD  
Mark B Juckett, MD  
Vivek Roy, MD  
Edward Agura, MD  
Miguel-Angel Perales, MD  
Thomas Joseph, MPS, CAE, ASBMT Executive Director  
Sue Frechette, BSN, MBA Consultant

## Financial Disclosures/Other Potential Conflicts of Interest

Conflicts, if any, are disclosed in accordance with the American Society for Blood and Marrow Transplantation (ASBMT) conflict of interest policy.

## Adaptation

This measure was not adapted from another source.

## Date of Most Current Version in NQMC

2012 Apr

## Measure Maintenance

Unspecified

## Date of Next Anticipated Revision

Unspecified

## Measure Status

This is the current release of the measure.

The measure developer reaffirmed the currency of this measure in February 2017.

## Measure Availability

Source not available electronically.

For more information, contact the American Society for Blood and Marrow Transplantation (ASBMT) at 85 W. Algonquin Road, Suite 550, Arlington Heights, IL 60005; Phone: 847-427-0224; Fax: 847-427-9656;



Web site: [www.asbmt.org](http://www.asbmt.org) ; E-mail: [mail@asbmt.org](mailto:mail@asbmt.org).

## NQMC Status

This NQMC summary was completed by ECRI Institute on September 24, 2013. The information was verified by the measure developer on October 25, 2013.

The information was reaffirmed by the measure developer on February 8, 2017.

## Copyright Statement

This NQMC summary is based on the original measure, which is subject to the measure developer's copyright restrictions.

## Production

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## Disclaimer

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